FIBER-LAN INDOOR

Product Type	Optic Cable

Construction

Dielectric
Tight Buffer
Singlemode or Multimode

Description

Optical cable with singlemode or multimode optical fibers arranged in "tight" design. Optical fibers are coated with acrylate resin and a secondary coating of thermoplastic material. Dielectric strength members surround the set of fibers and a thermoplastic flame-retardant outer jacket covers it.

Applications

Installation Environment	Indoor
Operation Environment	Installation in ducts and connection between entrance rooms

Standards Compliance

- ITU-T G.651: "Characteristics of a 50/125 µm multimode graded index optical fibre and cable"
- ITU-T G.652: "Characteristics of a single-mode optical fibre and cable"
- ITU-T G.657: "Characteristics of a bending loss insensitive single mode optical fibre and cable for the access network"
- ICEA S-83-596: "Standard for optical fiber cable premises distribution cable"
- Telcordia GR-409-CORE: "Generic requirements for indoor fiber optic cable"

Certifications   ETL Listed

Constructive characteristic

Optical Fiber   SM (Singlemode), MM (Multimode) OM1, OM2, OM3 and OM4.

Fiber Coating   Acrylate

Fiber Identification

Fiber	Color
01	Blue
02	Orange
03	Green
04	Brown
05	Slate
06	White
07	Red
08	Black
09	Yellow
10	Violet
11	Pink
12	Acqua

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Cabling

Fiber Count	Sub-units Count	Fibers per sub-unit
2 a 12	Single core, no sub-units	
16	4	4
24	4	6
36	6	6
48	4	12
72	6	12

obs.: Sub-units jacket (16, 24, 36, 48 e 72 fibers cables) and external jacket are made of the same color material and sub-unts are indentified by numbers (#1, #2, #3, #4, #5 e #6).

Tensile Strength Yarns

Dielectric yarns

Outer Jacket

Thermoplastic flame-retardant material. Outer and inner (when applicable) sheath color identification according to TIA-598-C, as table bellow.

CHARACTERISTIC	SINGLEMODE 9/125µm	MULTIMODE 50/125µm	MULTIMODE 62,5/125µm	MULTIMODE 50/125µm OM3/OM4
Outer sheath color	YELLOW	ORANGE	ORANGE	ACQUA
Inner sheath color				

Obs.: Other colors under consultation.

Flame Standards

Dimension

	2 Fibers	4.8
	4 Fibers	5.2
	6 Fibers	5.4
	8 Fibers	6.0
	10 Fibers	6.4
Nominal outer diameter (mm)	12 Fibers	6.6
	16 Fibers	15.0
	24 Fibers	15.0
	36 Fibers	18.0
	48 Fibers	18.6
	72 Fibers	21.6
	2 Fibers	19
	4 Fibers	21
	6 Fibers	24
	8 Fibers	34
	10 Fibers	38
Nominal weight (kg/km)	12 Fibers	40
	16 Fibers	192
	24 Fibers	192
	36 Fibers	231
	48 Fibers	254
	72 Fibers	372
Outer jacket nominal thickness (mm)	2 to 12 Fibers	0.95
	16 to 72 Fibers	1.6
Inner jacket nominal thickness - sub-unit jacket (mm)	16 to 72 Fibers	0.65

Physical Characteristics

Minimum bending radius (mm)	- During Installation: 15 x outer diameter - After Installation: 10 x outer diameter
Maximum Tensile Load During Installation (kgf)	0.2 x cable weight
Installation Temperature	0 ºC to 40 ºC
Storage Temperature	0 ºC to 40 ºC
Operation Temperature	0 ºC to 40 ºC

Optical Characteristics

Singlemode Optical Fiber Characteristics: According ET 2000 - ANNEX A
Multimode Optical Fiber Characteristics: According ET 1999 - ANNEX B

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Marking

Outer Sheath:

"FURUKAWA FIBER-LAN INDOOR   y   wF   z   x   month/year   k   LOTE nL (**)"

Inner Sheath:

"#n"

Where:
y = Type of optical fiber
MM(50)   50µm multimode fiber
MM(62.5)   62.5µm multimode fiber
SM   Singlemode fiber
BLI   Bending Loss Insensitive fiber

w = Fiber count (2, 4, 6, 8, 10, 12, 16, 24, 36, 48 and 72)

x = Cable protection grade (COG, COR, COP, LSZH)

z = Denomination for special fiber
G-652D   For SM ITU-T G.652.D fibers
G-657A-1   For SM ITU-T G.657 fibers
GIGABIT   For OM2+ (MM50) fibers with 1 Gbps transmission rate
10 GIGABIT OM3   For MM50 fibers with 10 Gbps transmission rate in 300m
10 GIGABIT OM4   For MM50 fibers with 10 Gbps transmission rate in 550m

month/year MM/YYYY

k = TYPE OFNR C(ETL)US
Note: ETL Listed certificate applicable only for cables with PVC jacket and up to 12 fibers count.

nL = Lot number

(**) = Length marking   xxxxxx m

n = Sub-unit number (1, 2, 3, 4, 5 and 6) printed each 60mm

Package

Type	Wooden reel
Length	2, 4, 6, 8, 10 or 12 fiber count: 2100m ±5% 16, 24 or 36 fiber count: 900m ±5% 48 or 72 fiber count: 500m ±5%